

Remarks:

Claim Objections:

A. The examiner objects to the use of the phrase: “allow a binding” in claim 97 [b]. This has been changed to “allow binding” - the “a” has been struck out.

B. The examiner objects to the use of the phrase: “wherein said applying onto a membrane method includes blotting” in claim 109. This has been struck out and replaced with: “wherein the applying of said lysate and said standards onto said membrane is achieved by a blotting method.

C. The examiner noted a repeated word in claim 115: “is is further comprising”. The duplicate “is” has been struck out

6. Claims Rejections:

A. The term “new method” in claim 97 is objected to, as the word “new” is indefinite. The word “new” here has been struck out.

B. The step recited in claim 97 part [e] is objected to, as it is unclear as to what exactly is being applied to the membrane. To make this more clear, the word “separately” was added, to indicate that the lysate and standards are applied individually, to separate areas of the membrane. Also, the standards are now described as “a plurality of standards”, to clarify that more than one standard solution is used. In the dot blot procedure described in the specification (Figure 6; Page 17, line 18), the lysate and standard solutions are pipetted

directly to a dry membrane – here, they are the only reagents that are applied. Claim 97 covers the dot blot procedure, so part [e] states the application in a broad sense. In other procedures, the lysate and standards are electro-blotted from an electrophoresis gel onto the membrane, using a transfer buffer. These additional procedures are stated in dependent Claims 99, 100, 109, and 110. However, the make up of the transfer buffer used, and the use of this type of buffer and technology is widely known in the art. It was thought that the stating of the precise nature of these buffers in the claims would be improper.

C. The phrase “an enzyme-conjugated antibody to said hapten” in claim 97, part [f], part [1] is objected to as the term “to said hapten” is indefinite. This has been changed to: “an enzyme-conjugated antibody specific for said hapten”.

D. The phrase: “a color or light-producing substrate for said enzyme, thereby producing a signal” in claim 97, part [f], part [2] is objected to as unclear, since it is not indicated that the substrate has to contact the enzyme to produce the signal. To clarify this, this has been changed to: “a color or light-producing substrate that contacts the enzyme on said enzyme-conjugated antibody, thereby producing a signal”.

E. The use of the phrase: “is further comprising:” in claim 99 is objected to as improper. This has been changed to: “further comprises:”

F. The use of the word “the” in claim 99 part [a], [b], and [c], is objected to, since it describes certain steps as pre-defined, with antecedents (i.e. “The applying of”). This has been changed and the “the” and “of” words deleted.

G. The mention of the Schagger-Von Jagow method of electrophoresis in claim 100 is objected to, as it is not commonly known in the art, and no reference referring to the method is cited. The reference to this method is contained in the Information Disclosure form, as reference 13. The specification has been changed where the Schagger-Von Jagow method is mentioned, so that this reference is cited:

“Cell pellets were lysed in 0.4 ml/tube of Schagger-Von Jagow (SVJ) electrophoresis system treatment solution and treated at 95° C for 5 min. Lysates (100 µl each) were separated by SDS-PAGE run according to Schagger-Von Jagow (see Schagger, H., and Von Jagow, G., Analytical Biochemistry 166:368-379, 1987) along with FITC-Insulin standards, and treated aliquots of the cell-unbound incubation mixture.”

H. The use of the term “sensitive detecting” in claim 101 is objected to, as the word “sensitive” is a relative term which renders the claim indefinite. To correct this, the “whereby...” phrase at the end of the claim has been deleted. This phrase did not effect the technical aspects of the claim. Other changes in the claim have been made to make it more clear:

“Claim 101. (CURRENTLY AMENDED) The method of claim 97 step [f] step [1], wherein

the applying of an antibody to said membrane is further comprising:

[a] applying an anti-hapten antibody, comprising an antibody specific for
said hapten, to said membrane and,

[b] applying an enzyme-conjugated antibody specific for said anti-hapten
antibody, to said membrane.”

I. The use of the term “conventional transfer membrane” in claim 111 is objected to, as the word “conventional” is a relative term which renders the claim indefinite. To correct this, the term “conventional” has been deleted.

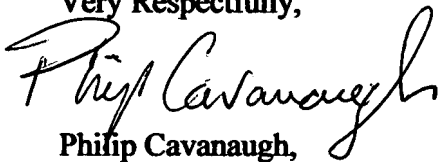
Applicant Comments:

The “membrane” used throughout, is defined in claim 97 as “membrane”. Throughout the claims this was referred to as “membrane support”. As this has no antecedent, the word “support” has been struck out in all cases. Claim 107 erroneously referred to Claim 97, where it should have referred to Claim 106, as Claim 97 does not mention “protein”. Claim 110 erroneously referred to Claim 108, where it should have referred to Claim 109. In certain dependent claims, the word “claim” was not capitalized, this has been corrected. The references to the steps in Claim 97 have all been changed to the format: “Claim 97 step [e]”. Claim 116 was added, as the use of a block solution was not included before. As certain blot techniques (albeit rare) do not require a block, this was included as a separate claim.

Conclusion:

The applicant wishes to thank the examiner for the suggestions for changes on the office action, and for the effort to date. The applicant submits that the specification and claims are now in proper form, and hopes that this amendment places the claims in a form for allowance.

Very Respectfully,

A handwritten signature in cursive script, appearing to read "Philip Cavanaugh".

Philip Cavanaugh,

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